

Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1-17 (Cancelled).

18. (Currently Amended) A piston ring comprising a thermal spray coating at least on an outer peripheral surface, _____ which is combined with a cylinder liner of cast iron having a tensile strength of 300 MPa or less, _____ said thermal spray coating comprising chromium carbide particles having an average particle size of 5µm or less, ~~and~~ _____ dispersed in a matrix metal composed of a Ni-Cr alloy or a Ni-Cr alloy and Ni, _____ which has an average pore diameter of 10 µm or less and a porosity of 8% or less by volume.

19. (Previously Presented) The piston ring according to claim 18, wherein said thermal spray coating has a Vickers hardness of 700 Hv0.1 or more on average, and the standard deviation of said hardness is less than 200 Hv0.1.

20. (Currently Amended) A piston ring comprising a thermal spray coating at least on an outer peripheral surface,

_____ which is combined with a cylinder liner of cast iron having a tensile strength of 300 MPa or less,

_____ said thermal spray coating comprising

_____ (1) a first phase having chromium carbide particles dispersed in a matrix metal composed of a Ni-Cr alloy or a Ni-Cr alloy and Ni, and

_____ (2) a second phase composed of at least one metal selected from the group consisting of Fe, Mo, Ni, Co, Cr and Cu or an alloy containing said metal,

_____ said first phase existing more than said second phase.

21. (Previously Presented) The piston ring according to claim 20, wherein an area ratio of said first phase to a surface portion excluding pores (100%) is 60% to 95% in said thermal spray coating.

22. (Previously Presented) The piston ring according to claim 20, wherein said chromium carbide particles of said thermal spray coating have an average particle size of 5 μ m or less.

23. (Previously Presented) The piston ring according to claim 20, wherein said thermal spray coating has an average pore diameter of 10 μ m or less and a porosity of 8% or less by volume.

24. (Previously Presented) The piston ring according to claim 18, wherein said chromium carbide particles of said thermal spray coating have an average particle size of 3 μ m or less.

25. (Previously Presented) The piston ring according to claim 18, wherein said thermal spray coating has an average pore diameter of 5 μ m or less and a porosity of 4% or less by volume.

26. (Previously Presented) The piston ring according to claim 18, wherein said thermal spray coating has a surface roughness (10-point average roughness Rz) of 4 μ m or less.

27. (Previously Presented) The piston ring according to claim 18, wherein said chromium carbide particles of said thermal spray coating are dendritic and/or non-equiaxial.

28. (Previously Presented) A method for producing a piston ring recited in claim 18, comprising thermally spraying a composite powder having said chromium carbide particles dispersed in said matrix metal, at least onto an outer peripheral surface of said piston ring.

29. (Previously Presented) A method for producing a piston ring recited in claim 20, comprising thermally spraying a mixed powder of (a) a composite powder having said chromium carbide particles dispersed in said matrix metal, and (b) a metal or alloy powder forming said second phase, at least onto an outer peripheral surface of said piston ring.

30. (Previously Presented) The method according to claim 28, wherein said composite powder is obtained by rapidly solidifying a melt of said matrix metal containing said chromium carbide particles.

31. (Previously Presented) The method according to claim 28, wherein said composite powder is obtained by granulating and sintering said chromium carbide particles and said matrix metal particles.

32. (Previously Presented) The method according to claim 28, wherein said thermal spraying is conducted by a high-velocity oxygen fuel spraying method or a high-velocity air fuel spraying method.